

L-1055-66

ACC NR: AP6002468

frequency of emission. At different inclinations of the mirror, laser action was attained on different lines in the range between 9090 and 9540  $\text{cm}^{-1}$ . The laser used had an inhomogeneously broadened luminescence line at 1.06  $\mu$ . A glass prism with an angular dispersion of 1 sec/ $\text{\AA}$  was utilized in the experiments. Laser action throughout such a wide range was attributed to the fact that the "dispersion" mode of operation is responsible for selective losses, making generation possible on lines which are not excited in the Fabry-Perot mode of operation. Orig. art. has: 2 figures. [CS]

SUB CODE: 20 / SUBM DATE: 21Oct65/ ORIG REF: 002/ OTH REF: 002/ ATD PRESS:

Card

L 2979-66 EWP(e)/EWT(m)/EWP(i)

WH

ACCESSION NR: AP5025088

UR/0368/65/003/003/0225/0229

621.375.9:535.89

AUTHOR: Broude, V. L.; Zaika, V. V.; Kravchenko, V. I.; Soskin, M. S.

TITLE: The operation of a ruby laser with inclined mirrors

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 3, 1965, 225-229

TOPIC TAGS: ruby laser, resonator mirror, mirror alignment

ABSTRACT: The present work originated during a study of the kinetics of giant pulse lasers with rotating prisms, where a considerable change in beam directionality was observed in comparison with the case of a fixed prism and parallel mirrors. The field distribution on the near and far mirror regions of a ruby laser and the time-varying nature of the emission were studied as a function of the degree of misalignment of a plane resonator in the direction perpendicular to the crystal optical axis. Water-cooled polished ruby crystals 120 mm long and 12 mm in diameter were used. The pumping flashlamp was placed under the crystal whose optical axis was vertical with respect to the flashlamp and whose ruby ends were parallel within 4". Dielectric-coated plane mirrors were used with reflection coefficients from 99 to 30% at 6943 Å and an adjustment within 10". The resonator length was varied from 40 to 150 cm.

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ACCESSION NR: AP5025088

The experimental results indicate that: 1) the intensity distribution maximum is shifted in the direction of the remote edges of the mirror; 2) laser pulses from both ends of the resonator are displaced in the direction of mirror misalignment; 3) the intensity distribution in the remote region is uniform; 4) a correspondence exists between patterns for the near and remote regions for any inclination of mirrors; 5) a variation in the orientation of the longitudinal crystal axis within the resonator by an angle up to 30' does not significantly affect either the structure of the remote and near regions or the beam directionality; only a relatively small jump in the rise of pumping energy due to reflection losses at the crystal ends was observed; and 6) the amplitude and regularity of laser spikes in the case of inclined mirrors are greater than in the case of parallel mirrors, provided pumping above threshold is identical in each case. The foregoing would seem to indicate that generation in a misaligned plane resonator is, in a certain sense, more ordered and its mode structure during the entire pulse better preserved than in the case under investigation. Orig. art. has: 3 figures. [YK]

ASSOCIATION: none

SUBMITTED: 05Jan65

ENCL: 00

SUB CODE: EC

NO REF SOV: 005

OTHER: 009

ATD PRESS: 4109

Card 2/2 Bvk

L 2313-66

ACCESSION NR: AP5021883

2

passing it successively through three 58° glass prisms. The glass used had an index of refraction of 2.02. The angle  $\alpha$  (see Fig. 1) was approximately 225°, and the total dispersion was about 0.25 mμ per minute of arc. The emission threshold for this dispersion laser is shown as a function of mirror alignment in Fig. 2. The point at  $\phi = 9'$  on the  $\alpha$ -axis gives the emission threshold for a beam with  $\lambda = 694.3$  mμ normal to the mirror surface. This is the  $R_1$  emission ordinarily observed in ruby lasers. The point at  $\phi = 3'$  is the emission threshold at 692.29 mμ (the  $R_2$  ruby line). Spectrograms of the laser emission were taken, and the intensity distribution in the long-range zone was measured for the points marked 1-5 in Fig. 2. Emission at points 1 and 2 consists of a single line with a wavelength of 692.9 mμ ( $R_2$ ), a 694.3-692.9 mμ doublet was observed at point 3, and points 4 and 5 showed emission only on the 694-3 mμ line ( $R_1$ ). Unstable conditions are observed at certain mirror angles. In these cases, emission takes place on a single line or on both lines simultaneously. It is suggested that this instability should be further investigated for the specific case of near-lying energy levels. Orig. art. has: 2 figures. [14]

ASSOCIATION: Institut fiziki Akademii nauk UkrSSR (Institute of Physics, Academy of Sciences, UkrSSR)

SUBMITTED: 04Feb65

NO REF SOV: 002

ENCL: 02

OTHER: 002

SUB CODE: EC, OP

A.T. D. Press 4/10/65

Card 2/4

L-2313-66

ACCESSION NR: AP5021883

ENCLOSURE: 01

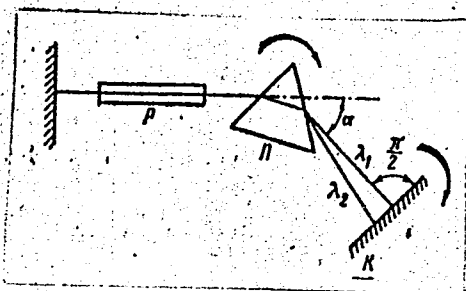


Fig. 1. Schematic of dispersion-type prism resonator

P - Ruby rod; D - dispersion prism;  
K - end mirror of the resonator.

Card 3/4

L 01056-67 EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(t)/ETI/EWP(k) IJP(c) WH/WG

ACC NR: AT6015134 JD/GD

SOURCE CODE: UR/0000/66/000/000/0107/0122

62

B+1

AUTHOR: Soskin, M. S.

ORG: Institute of Physics, AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Linear phase distortion of resonator and generation of induced radiation by a ruby crystal

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminara. Kiev, Naukova dumka, 1966, 107-122

TOPIC TAGS: laser, ruby laser, solid state laser

ABSTRACT: Background material on the laser theory with particular reference to the operation with misaligned mirrors is given. The results of the following experimental investigation are reported. The generation threshold, field distribution over the mirrors and at infinity, and radiation time characteristics were studied in a plane-resonator ruby laser; objectives with focal lengths of 150 and 2000 mm were used; 120-mm long, 12-mm diameter ruby crystals had their end surfaces parallel within 4 angular seconds. Plane dielectric mirrors with reflection factors of 99.5,

Cord 1/2

L 27734-66 FBD/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k)/EWA(h). IJP(c) WG/GD/

ACC NR: AT6015135 WH

SOURCE CODE: UR/0000/66/000/000/0123/0136

AUTHOR: Broude, V. L.; Soskin, M. S.

ORG: Institute of Physics AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Laser with adjustable frequency

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminara. Kiev, Naukova dumka, 1966, 123-136

TOPIC TAGS: Raman scattering, ruby laser, solid state laser, piezoelectric crystal, laser optics

ABSTRACT: The authors consider two methods for changing the working frequency of a solid state laser: 1. changing the spectral properties of the laser resonator, and 2. interactions between a powerful beam of induced emission and nonlinear media resulting in multiphonon processes. A review of the literature shows that these two methods may be used for producing additional working frequencies which differ from the fundamental frequency for a given active solid during free emission. A new laser system is proposed for emission in various spectral positions with provision for adjustment from one working frequency to another and some of the problems involved in producing such a system are discussed. A block diagram of the proposed multifrequency laser is shown in the figure. The system is based on a ruby, a KDP crystal and a li-

Card 1/2

L 28378-66 EEC(k)-2/EWA(h)/EWP(j)/EWP(k)/EWT(l)/EWT(m)/FBD/T IJP(c) GG/RM/

ACC NR: AP6016053 WH/WG/WW SOURCE CODE: UR/0185/66/011/005/0569/0570

AUTHOR: Broude, V. L.; Pohorets'kyi, P. P.; Sal'kova, K. M.; Soskin, M. S. 50  
B

ORG: Institute of Physics, AN URSR, Kiev (Instytut fizyky AN URSR)

TITLE: Stimulated Raman scattering of light by benzene in the dispersion resonator of a ruby laser

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 11, no. 5, 1966, 569-570

TOPIC TAGS: Raman scattering, ruby laser, laser emission

ABSTRACT: An investigation was made of stimulated Raman scattering (SRS) by benzene in the dispersion resonator (see Fig. 1) of a ruby laser. In a resonator with two heavy flint glass prisms, the angular separation of the ruby emission and the Raman scattering at a frequency of  $992 \text{ cm}^{-1}$  reached  $2^\circ$ . The transmittivity of the mirrors was approximately 5%. A container 15 cm long with glass windows was filled with pure benzene. Q-switching was achieved by using 10-mm-thick KS-18 glass in the resonator. The ruby radiation consisted of a series of separate pulses, each with an average power close to  $10 \text{ kwatt/cm}^2$  and a length of 500 nsec, with pump level 30% above threshold. Intensive stimulated Raman scattering was observed in the dispersion resonator during ruby generation exceeding the threshold by 10-20%. It should be noted that SRS was observed when mirror 3 was unaligned and even when it was absent. Changes in the far zone of SRS and the ruby emission behind mirror 2 when the benzene-

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L 28378-66

ACC NR: AP6016053

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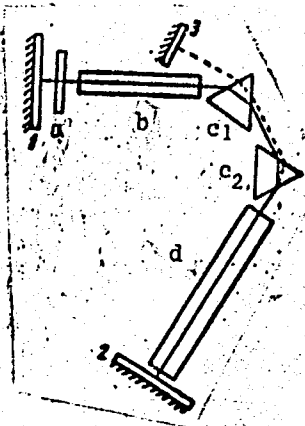


Fig. 1. Diagram of dispersion resonator

1, 2, 3 - Mirrors; a - KS-18 glass; b - ruby;  
c<sub>1</sub>, c<sub>2</sub> - prisms; d - benzene-filled vessel.

filled vessel was turned up to  $4^\circ$  (in either the horizontal or vertical plane) showed that the direction of SRS generation does not depend on the orientation of the vessel and its windows and is always perpendicular to mirror 2. When the ruby generation threshold was exceeded by 30% the efficiency of the transformation of ruby emission into SRS approached 10%. Orig. art. has: 1 figure. [JA]

SUB CODE: 20/ SUBM DATE: 07Feb66/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 4262  
Card 2/2 CC

SOSKIN, S.A.

Combined layout of various parts in one billet. Mashinostroitel'  
no.11:19-20 # '60. (MIRA 13:10)  
(Laying out (Machine-shop practice))

Synthesis and Magnetic Properties of Ferrites  
Exhibiting a Rectangular Hysteresis Loop

SOV/48-22-10-11/23

in table 3. In the selection of the prescriptions some compositions worked out under the supervision of Kosarev (Ref 9) were considered. The magnetic properties of ferrites were examined under dynamical conditions by means of measuring the amplitude, frequency, and temperature characteristics. As the amplitude characteristics of the ferrites ПП-2 (Fig 6) show, the relative remanent magnetization exhibits a maximum at a certain amplitude of the field strength. The coercive force increases considerably faster with increasing amplitude of the field strength than the maximum magnetization. Considering these properties it is useful to employ ferrites with a rectangular hysteresis loop in the case of comparatively low field strengths if the remanent magnetization has its maximum. For the frequency dependence of  $B_m$ ,  $B_r/B_m$ , and  $H_c$  (Fig 7) of the ferrites PP-24 a weak dependence of the maximum and of the remanent magnetization in the frequency range of from 10 to 100 kilocycles is characteristic. The temperature characteristics of the ferrite PP-24 in the temperature range of  $-70$  to  $+120^\circ$  are represented in figure 8. The curves show that  $B_m$ ,  $B_r/B_m$ ,

Card 2/3

RABKIN, Lev Izrailevich; SOSKIN, Semen Aronovich; EPSHTEYN, Boris  
Shayevich; KAZARNOVSKIY, D.M., red.; SOBOLEVA, Ye.M., tekhn.  
red.

[Technology of ferrites] Tekhnologiya ferritov. Moskva, Gos-  
energoizdat, 1962. 358 p. (MIRA 15:9)  
(Ferrates)

	1ST AND 2ND EDGES															3RD AND 4TH EDGES																												
	PROCESSES AND PROPERTIES INDEX																																											
<div style="text-align: right; font-weight: bold; font-size: 1.2em;">2</div> <p>           Gelatinized emulsions. IV. Limiting thinness of the stabilizing layer. I. Ya. Kremnev and S. A. Shakhin (Leningrad Chem. Tech. Inst.). <i>J. Gen. Chem.</i> (U.S.S.R.) 16, 2000-5 (1940) (in Russian); cf. <i>C.A.B.</i> 20, 2072, 2482; 34, 2230. —Benzene was emulsified by shaking 5% aq.         </p> <p>           Na oleate soln. with successive portions until a new addn. of <math>C_{18}H_{35}</math> would have rendered the emulsion unstable; the limiting ("gelatinized") emulsions thus obtained are characterized by the "emulsifying capacity" <math>v_m = \text{max. vol. of the disperse phase } (C_{18}H_{35}) \text{ per 1 ml. of Na oleate soln.}</math> From microscopic measurements of the vol. <math>v</math> and the surface area <math>F</math> of the dispersed droplets, the thickness <math>\delta</math> of the water sheath around the droplets was found <math>3\gamma\delta = \phi v / F</math>, where <math>\phi = \text{ratio of the vol. of the emulsifying soln. and that, } v_m, \text{ of the disperse phase; in all limiting emulsions, } \delta \text{ was found to have approx. the same value, } \delta = 3.01 \mu; \text{ this is the same order of magnitude as the upper limit of the range of orienting surface forces in a free film of fused paraffin inhibiting the coalescence of 11g droplets (cf. Berdennikov, et al., C.A. 20, 2982). The limiting } v_m \text{ varies according to the method of emulsification; (I) depending on whether the emulsion was prepd. by (I) sharp violent shaking after each addn. of } C_{18}H_{35}, \text{ (II) regular, more uniform shaking, (III) perfectly uniform motion, } v_m \text{ was } = 100, 160, 265 \text{ ml., resp.; the droplet-size distribution curves were likewise different according to the method of emulsification, the dispersity decreasing from I to III. However, the total surface area } S_m \text{ of the droplets, identical with the limiting max. surface area developed by 1 ml. of the emulsifying soln., was const. } = 110^4 \text{ sq. cm., corresponding to } \delta = 10^{-4} \text{ cm. Emulsification by the 3 methods to the same const. } v_m = 100, \text{ resulted in } \delta = 0.010, 0.018, 0.024 \mu, \text{ resp.; the two latter emulsions could be dispersed still further by supplementary shaking, whereas the 1st, having attained the min. } \delta, \text{ could not. A limiting emulsion changes spontaneously on standing in the direction of increase of } \delta \text{ and decrease of } S; \text{ within 24 hrs., a } v_m = 100 \text{ emulsion changed from } \delta = 0.01 \text{ to } 0.025 \mu \text{ and from } S = 1 \times 10^4 \text{ to } 0.4 \times 10^4 \text{ sq. cm. If all of the Na oleate is coed. (adsorbed) on the benzene-water interface in a unimol. layer, the area per mol. (in a 5\% soln.) } = 100 \text{ sq. A.}</math> </p> <p style="text-align: right;">N. Thon</p>																																												
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																														EXTENDED INDEX														
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SOSKIN, S. A.

4

Gelatinized emulsions. V. Emulsifying ability of aqueous solutions of sodium oleate and gelatin. L. Ya. Kremnev and S. A. Soskin (Leningrad Technol. Inst.). *Kolloid. Zhur.* 1949, 11(1949). The emulsifying ability  $A$  of a substance cannot be judged from the max. vol.  $V_m$  of  $C_{18}H_{34}$  which can be emulsified by 1 cc. of the emulsifier soln., as  $V_m$  depends on the intensity of agitation ( $V_m$  is greater, the weaker is the shaking). The max. area  $S_m$  or the min. thickness  $\delta$  of the stabilizing layer is a true measure of  $A$ ; they did not vary when, because of varying agitation,  $V_m$  varied as 1:2.6; Na oleate (I) was the emulsifier. When concn.  $c$  increased from 1% to 5%, 10%, and 15%,  $S_m$  was 33, 100, 100, and 110  $\times 10^4$  sq. cm.; thus  $S_m$  and hence  $\delta$  were independent of  $c$  at high  $c$ . The area  $s$  occupied by 1 mol. I was 180 sq. A. at  $c = 1\%$ ; thus, dil. monolayers were efficient emulsifiers. The dispersity of the emulsions slightly increased with  $c$ , but the most frequent particle diam. remained near  $1 \mu$ . The vol. of  $C_{18}H_{34}$  that can be emulsified by 1 g. I was 3.3, 2.8, and 1.4 l. at  $c = 1, 5$ , and 15%; thus dil. solns. of I were better utilized. Photographic gelatin as emulsifier gave  $S_m$  of  $12 \times 10^4$  sq. cm. at  $c = 0.5$  and 1%; thus  $A$  of gelatin was  $1/4$ th the  $A$  of I. J. J. B.

Lab. Colloid Chem.

SOSKIN, S. A.

PA 78T6

USSR/Chemistry - Emulsions  
Chemistry - Homogenization

May/Jun 1948

"The Homogenization of Highly Concentrated Emulsions,"  
L. Ya. Kremnev, S. A. Soskin, Leningrad Tech Inst  
imeni Lensevet, 2 $\frac{1}{4}$  pp

"Kolloid Zhur" Vol X, No 3

Establish that at passage through capillaries at low pressures, homogenization of highly concentrated emulsions occurs. Study process of homogenization as result of the expansion of intense deformation of droplets until they disintegrate into smaller droplets. Submitted 2 Jun 1947.

78T6

USSR/Chemistry - Emulsions  
Chemistry - Stability

Jan/Feb 49

"Gelatinized Emulsions: VII, Stability of Stabilizing Layers: Role of a Free Stabilizing Solution," Ye. Kremeney, S. A. Soskin, Lab of Colloid Chem, Leningrad Tech Inst Imeni Lensev, 6 pp

"Kolloid Zhur Vol XI, No 1

Determined the insufficient mechanical stability of stabilizing layers of critical thickness in limited concentrated emulsions not containing free stabilizing solutions. Found that a hyperbolic equation gives relationship of (1) speed of disintegration (under

45/49PT17

USSR/Chemistry - Emulsions (Contd) Jan/Feb 49

pressure) of highly concentrated emulsions and time required for passage of globules through emulsion to (2) thickness of layers of free stabilizing solution between "protective" layers. Submitted 2 Oct 47.

SOSKIN, S. A.

45/49PT17



SOSKIN, S.B.

Shkliar's centrifuge with two fittings. Med.prom. 13 no.1:  
59-60 Ja '59. (MIRA 12:10)

1. Mediko-instrumental'nyy ordena Lenina zavod "Krasnogvardeyets."  
(CENTRIFUGES)

SOSKIN, S.B.

Device for intraocular surgery (endoophthalmooperator). Med. prom.  
13 no.2:60-61 F '59. (MIRA 12:3)

1. Mediko-instrumental'nyy zavod "Krasnogvardeyets."  
(EYE, INSTRUMENTS AND APPARATUS FOR)

SOSKIN, S.B.

Phrenic nerve mobilizer. Med.prom. 13 no.7:58-59 J1 '59.  
(MIRA 12:10)

1. Mediko-instrumental'nyy zavod "Krasnoyarskiyets."  
(SURGICAL INSTRUMENTS AND APPARATUS) (PHRENIC NERVE)

SOSKIN, S.B.

Trephine for corneoscleral trepanation and posterior sclerectomy.  
Med. prom. 13 no.8:61-62 Ag '59. (MIRA 13:8)

1. Mediko-instrumental'nyy zavod "Krasnogvardeyets".  
(EYE, INSTRUMENTS AND APPARATUS FOR)

SOSKIN, S.B.

Mezdrin's bronchoesophagoscope. Med.prom. 13 no.10:57-59 0 '59.  
(MIRA 13:2)

1. Mediko-instrumental'nyy zavod "Krasnogvardeyets."  
(BRONCHOSCOPE)

SOSKIN, Varlen L'vovich

[Communists of Siberia, initiators of patronage of the cities  
over villages] Kommunisty Sibiri, zachinateli shefstva goroda  
nad derevnei. Novosibirsk, Novosibirskoe knizhnoe izd-vo,  
1958. 51 p. (MIRA 15:4)  
(Siberia--Rural conditions)

SOSKIN, V.L.

Results of a conference on the history of Siberia and the Far  
East. Izv. Sib. otd. AN SSSR no. 7:128-131 '60. (MIRA 13:8)  
(Siberia, Eastern--History)

IVANOV, B.V.; MIGIRENKO, G.S., prof.; MOLETOTOV, I.A.;  
OMBYSH-KUZNETSOV, S.O.; SOSKIN, V.L.; LOKSHINA, O.A., tekhn.  
red.; VYALYKH, A.M., tekhn. red.

[Science center at Novosibirsk] Novosibirskii nauchnyy tsentr.  
Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1962. 206 p.  
(MIRA 16:7)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye.  
(Academgorodok--Academy of Sciences of the U.S.S.R.)



SOSKIN, Ya.M.

On the question of xanthomatosis. Arkh. pat. 22 no. 8:74-79 '60.  
(MIRA 14:1)

(LIPOIDOSIS)

SOSKIN, Ya.M.; BOVA, E.A.

Cause of disorders in the embryogenesis of the heart. Arkh.anat.  
gist. i embr. 38 no.4:97-98 Ap '60. (MIRA 14:5)

1. III gorodskaya bol'nitsa Nizhnego Tagila, Sverdlovskoy oblasti.  
Adresa avtorov: Nizhniy Tagil, Sverdlovskoy obl., ul. Bol'nichnaya,  
III gorodskaya bol'nitsa (for Soskin). Saldinskiy rayon, Sverdlovskoy  
oblasti, Bas'yanovskaya bol'nitsa (for Bova).  
(HEART--ABNORMITIES AND DEFORMITIES)

SOSKIN, Ya.M.

Reaction of the neurons of the cerebral cortex in reparative  
regeneration in mammals. Biul. eksp. biol. i med. 59 no.4:  
113-116 Ap '65. (MIRA 18:5)

1. Kafedra gistologii (zav. - prof. T.A. Grigor'yeva) II Mos-  
kovskogo meditsinskogo instituta imeni Pirogova.

SOSKIN, Ya.M.

Experimental data on regenerative processes in the cerebral cortex  
of rats and cats. Arkh. anat., gist. i embr. 49 no.7:75-82 J1 '65.  
(MIRA 18:10)

1. Kafedra gistologii (zav. - prof. T.A.Grigor'yeva) 2-go  
Moskovskogo meditsinskogo instituta imeni Pirogova.

ZAKROCHINSKIY, Stepan Vasil'yevich; SOSKIN, Mendel' Davidovich;  
SOSKINA, I.M., red.; SHKLOVSKAYA, I.Yu., red.izd-va;  
DOBUZHINSKAYA, L.V., tekhn. red.

[Reference materials on boiler inspection] Rukovodia-  
shchie materialy po kotlonadзору. Izd.2., perer. i dop.  
Moskva, Metallurgizdat, 1963. 823 p. (MIRA 17:1)

SOSKINA, S.Ya. (Moskva)

Health education at plants of the aniline dye industry. Fel'd.  
1 akush. 24 no.7:51-52 JI '59. (MIRA 12:10)  
(CHEMICAL INDUSTRIES--HYGIENIC ASPECTS)

СОСКИНА, Е. А.

"Etude des reactions pyrogenetiques de la condensation des hydrocarbures.  
Communication VI." Nemcov, M. S., Nizovkina, T. V. et Soskina, E. A. (p. 1313)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1938, Vol. 8, No. 14-15

1938, p. 1324.

"Etude des reactions pyrolytiques de la condensation des hydrocarbures.  
Communication VII." Nemcov, M. S., T. V. Nizovkina, et Soskina, E. A. (p. 1324)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1938, Vol. 8, No. 14-15



ASKINAZI, Ye.G.; SOSKINA, Ye.A.

Annotated bibliography on the processing of oil shales. Trudy  
VNIIPS no.7:304-322 '59. (MIRA 12:9)

(Bibliography—Oil shales)

SOSKINA, Ye.A.

Annotated bibliography on the refining of oil shales; Soviet  
and foreign literature in 1957. Trudy VNIIT no.8:233-245  
'59. (MIRA 13:4)

(Bibliography--Oil shales)

SOSKINA, Ye.A.

Annotated bibliography on the processing of oil shales. Trudy VNIIT  
no.9:234-250 '60. (MIRA 13:11)

(Oil shales--Bibliography)

SOSKINA, Ye.A.

Annotated bibliography on the processing of oil shales. Trudy  
VNIIT no.10:240-266 '61. (MIRA 15:3)  
(Bibliography--Oil shales)

SOSKINA, Ye. A.

Annotated bibliography on problems of oil shale processing.  
Trudy VNIIT no. 11:314-330 '62. (MIRA 17:5)

SOSKINA, Ye.A.

Annotated bibliography on the problems of refining oil  
shales. Trudy VNIIT no.12:312-330 '63. (MIRA 18:11)

YEMBAYEV, M.F., inzh.; IYEVLEV, A.M., inzh.; LEGOV, P.R., inzh.;  
RAZD'YAKONOV, V.K., inzh.; SOSKIND, A.M., inzh.; DYRDOVA,  
Z.G., red.; MODLIN, G.D., tekhn.red.

[Electric transmission lines and substations for 400 kv. systems;  
materials of the Scientific Conference on the Generalization of  
Experience in the Design, Manufacture, Erection, and Operation of  
Electric Transmission Lines and Substations] Linii elektropredachi  
i podstantsii 400 kv; materialy Nauchno-tekhnicheskogo soveshchaniia  
po obobshcheniiu opyta proektirovaniia, stroitel'stva, montazha i  
ekspluatatsii linii elektropredachi i podstantsii. Kuibyshev,  
Orgenergostroi, 1959. 187 p. (MIRA 13:6)

1. Nauchno-tekhnicheskoye soveshchaniye po obobshcheniyu opyta  
proektirovaniya, stroitel'stva, montazha i ekspluatatsii liniy  
elektropredachi i podstantsiy. Kuibyshev, 1958.  
(Electric lines) (Electric substations)

SOSKIND, A.M., inzh.; MANDZHIKOV, F.Ch., inzh.

Using hot gases in heating aggregates of concrete mixes. Energ.  
stroil. no.4:78-79 '59. (MIRA 13:8)

1. Institut "Orgenergostroy".  
(Concrete) (Aggregates (Building materials))



1 26309-68 FWD: /GNT(m)/BTC(m)-5/T RM/WW

ACC NR: AP601119

(A)

SOURCE CODE: UR/0413/66/000/006/0022/0022

INVENTOR: Soskind, A. S.; Shulutko, R. I.

ORG: none

TITLE: A method for fireproofing cellulose materials. Class 8, No. 179746

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 22

TOPIC TAGS: cellulose, fire resistant material, titanium compound, antimony compound

ABSTRACT: This Author's Certificate introduces a method for fireproofing cellulose materials by the application of titanium-antimony compounds with subsequent treatment. The final treatment consists of rinsing in water to simplify the technical process and improve the quality of the resultant fireproof material.

SUB CODE: 11/

SUBM DATE: 08May63/

ORIG REF: 000/

OTH REF: 000

UDC: 677.46.021.921.2:678.  
.029.65:546.863-31.824

Card 1/1 *ce*

SOSKIND, D. M.

Cand. Tech. Sci.

Dissertation: "Effect of Aromatic Hydrocarbons with Condensed Cycles on  
Catalytic Cracking of Alkanes, Cyclanes and Alkenes."

14 Jun. 49

Moscow Order of the Labor Red Banner Petroleum Inst.

imeni Acad. I. M. Gubkin

SO Vecheryaya Moskva  
Sum 71

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SOSKIND, D. M.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor Fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62584

Author: Obryadchikov, S. N., Soskind, D. M.

Institution: None

Title: Effects of Aromatic Hydrocarbons Containing Condensed Rings on Catalytic Cracking of Alkanes, Cyclanes, and Alkenes

Original

Periodical: Neft. kh-vo, 1955, No 6, 72-78

Abstract: Effects of aromatic hydrocarbons having condensed rings (I) on catalytic cracking were studied using as examples the following mixtures: fraction of alkanes boiling range 192-250° + naphthalene; fraction of alkanes boiling range 249-319° + decalin + naphthalene +  $\alpha$ -methyl naphthalene; diisobutylene fraction and  $\alpha$ -methyl naphthalene. The experiments were conducted in a unit of a continuous flow type with stationary aluminosilicate catalyst at 500°; space velocity 0.98-1.0;

Card 1/2

ANASTAS'IN, V.F.; ARAKELOV, A.S.; BOBROV, A.L.; VIKHOREV, Yu.V.; VIL'DER, S.I.; GLUSHKO, I.K.; GOKUN, A.M.; PIN'KOVSKIY, Ya.I.; PASHKOV, N.D.; RYABUKHA, G.K.; REBENKO, G.S.; SMUROV, Fedor Pavlovich; SOSKIND, D.M.; SAMSONOV, B.A.; SEMENOV, A.B.; SULEYMANOV, A.B.; KHARLAMOV, A.A.; TSAR'KOV, B.N.; SHIFRIN, D.L.; SHEYNMAN, V.I.; ABAKUMOVSKIY, Dmitriy Dmitriyevich, red.toma; SVYATITSKAYA, K.P., vedushchiy red.; TROFIMOV, A.V., tekhn.red.

[Petroleum equipment; in six volumes] Neftianoe oborudovanie; v shesti tomakh. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol.4. 1959. 294 p. (MIRA 12:9)

(Petroleum refineries--Equipment and supplies)

SOV/65-59-4-7/14

AUTHORS: Agafonov, A.V., Soskind, D.M. and Abayeva, B.T.

TITLE: The Operation and Methods of Reconstruction of Catalytic Cracking Plants Where Bead Catalysts are Used (Opyt ekspluatatsii i puti rekonstruktsii ustanovok kataliticheskogo krekinga s sharikovym katalizatorom)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 34-44 (USSR)

ABSTRACT: Investigations were carried out in the VNII NP which made it possible to work out conditions and make recommendations for the manufacture of high quality petrols. Heavy distillates, boiling at temperatures between 300 and 500°C, can be used. The process is carried out in one stage and, therefore, the efficiency of the plant increased by 30 to 35%. The properties of the gas-oil fractions of Romashkaya petroleum are given in table 1. It can be seen that the heavy crudes differ from the kerosine-gas-oil fractions by their high boiling and solidification points, by their high content of tar, sulphur and aromatic compounds as well as by appreciable content of polycyclic aromatic compounds,

Card 1/3

SOV/65-59-4-7/14

The Operation and Methods of Reconstruction of Catalytic Cracking  
Plants Where Bead Catalysts are Used

asphaltenes and metal salts. Various investigations carried out in the Novoufimka plant during 1954 to 1955, and modifications of the plant carried out at the time, are discussed in detail. The reconstructions, carried out at present, aim to increase the efficiency of the plant 1.5-fold (first modification) and 1.7-fold (second modification) without altering the principal layout of the plant. A further reconstruction is to achieve a considerable improvement in the conversion process which will increase the efficiency of the plant by 100% (third modification). The first modification is based on recommendations made by the authors, the Novoufimka factory Giproneftemash and Giproneftezavod. This type of reconstruction was carried out on one plant of the NUNPZ and three plants of the Salavatskiy factory. The various modifications are listed in a table on page 40 and the most important of these discussed in detail. Table 2 shows the improvements achieved during 1956 to 1957 and the first nine months of 1958 in various plants where the recommended

Card 2/3

SOV/65-59-4-7/14

The Operation and Methods of Reconstruction of Catalytic Cracking  
Plants Where Bead Catalysts are Used

reconstructions have been carried out. The second modification was recommended by GrozNII and Giproneftezavod and the third by VNII NP and Giproneftemash. The lay-out of the last plant is given in Fig 3 and the authors suggest that this last modification should only be incorporated in newly-erected plants. There are, however, various drawbacks e.g. the circulation time of the catalyst is rather low, the generator is not completely efficient, the cooling pipes of the regenerator are unsatisfactory and this leads to an increased catalyst consumption. There are 3 figures and 2 tables.

Card 3/3

GLIKMAN, L.S.; BOCHAROV, I.V.; VIKHMAN, G.L.; ABROSIMOV, B.Z.; KIRILOV,  
Ye.A.; MEL'NIKOV, S.M.; AGAFONOV, A.V.; SOSKIND, D.M.

Rebuilding catalytic cracking units with a combined reactor-regenerator.  
Khim. i tekhn. topl. i masel 6 no.11:6-10 N '61. (MIRA 14:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
neftyanogo mashinostroyeniya.  
(Cracking process)



L 40257-66 EWT(1)/EWT(m)/T WW/WE

ACC NR: AT6019144

(W)

SOURCE CODE: UR/2807/65/000/224/0011/0019

AUTHOR: Soskind, G. L.

ORG: None

TITLE: The effect of atomizer tightness on fuel leakage along the valve stem of a diesel injector  $\gamma$

SOURCE: Tallinn. Politekhnikheskiy institut. Trudy, Seriya A, no. 224, 1965.  
Sudovyye silovyye ustanovki (Marine power installations); sbornik statey, no. 3, 11-19

TOPIC TAGS: diesel engine, fuel injection, fuel injector, flow rate, fuel heating, fuel atomizer, fuel control, VALVE

ABSTRACT: Fuel flow in the circular clearance between the injector valve stem and its casing is considered as a basis for determining the effect of atomizer tightness and other factors on fuel leakage along the stem. Atomizer tightness is defined as the time in seconds required for a reduction in pressure from  $p_1$  to  $p_2$  during hydraulic testing according to the formula

$$t_d = \frac{kl}{s^3d}$$

Card 1/3

UDC: 621. 431. 74. 004. 68

L 40257-66

ACC NR: AT6019144

where

$$k = \frac{12}{\pi} \alpha V \rho \nu \ln \frac{e^{bp_1} - 1}{e^{bp_2} - 1},$$

$d$  is the diameter of the nozzle valve guide in cm;  $l$  is the length of the sealing surface of the nozzle valve;  $s$  is the equivalent radial gap between nozzle valve and guide;  $\alpha$  is the compressibility of the fluid in cm<sup>2</sup>/kg;  $V$  is the volume of the delivery chamber in the stand used for hydraulic tests of the injector;  $\rho$  is the density of the mixture in kg·sec<sup>2</sup>/cm<sup>4</sup>;  $\nu$  is the viscosity of the mixture in cm<sup>2</sup>/sec and  $b=0.00219$  for diesel fuel. Fuel flow is assumed to be a steady, laminar, linear, axisymmetric motion of incompressible liquid between two concentric cylinders. Poisson differential equations are used for determining the rate of flow. A figure is given showing the boundary conditions for fuel particles sticking to the valve stem and atomizer surfaces. An expression is given for fuel flow conditions taking variation in the viscosity of diesel fuel at increased temperatures into consideration. The difference between the mating pairs in pumps and injector atomizers is that injector atomizers work under relatively high temperatures. This means that the fuel is preheated in the atomizing chambers of modern diesel engine injectors where temperatures reach 200°C and higher. It is shown that the relationship between fuel viscosity and temperature for any given fuel can be determined from a viscosity-temperature curve. The clearances of mating pairs in diesel fuel systems are not measured during manufacture but are determined by checking the pairs for hydraulic tightness during operation. This

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L 40257-66

ACC NR: AT6019144

method gives an overall evaluation of clearance and deviation from cylindrical shape in the valve stem sealing surfaces and the atomizer housing. The concept of "equivalent clearance"  $S$  is assumed in deriving a mathematical formula for fuel flow in an atomizer where the contact surfaces are not cylindrical. This represents a conditional clearance between the injector valve stem and its housing as ideal cylinders. Under these conditions the tightness of the mating injector pair is equal to the tightness of the actual atomizer achieved during hydraulic testing. An expression is given for fuel leakage along the injection valve stem during hydraulic testing of the atomizer. The derived equation for fuel flow in the circular space of the atomizer may be used in hydrodynamic calculations of fuel systems and in calculating fuel injection for worn injector atomizers. Orig. art. has: 4 figures, 14 formulas.

SUB CODE: 21,13/ SUBM DATE: none/ ORIG REF: 002

Card 3/3 *274*

ACC NR: AT6019145

(N)

SOURCE CODE: UR/2807/65/000/224/0021/0033

AUTHOR: Soskind, G. L.

ORG: None

54  
53  
C+1

TITLE: The effect of atomizer tightness in a diesel injector on the primary parameters of injection

SOURCE: Tallinn. Politekhnikheskiy institut. Trudy, Seriya A, no. 224, 1965.  
Sudovyye silovyye ustanovki (Marine power installations); sbornik statey, no. 3, 21-33

TOPIC TAGS: diesel engine, fuel injection, fuel injector, fuel heating, fuel atomizer, hydraulic resistance, engine fuel pump

ABSTRACT: Equations for hydrodynamic calculation of fuel systems are used as the basis for determining the effect of atomizer tightness on the injection process in diesel engines with fuel leakage along the valve stem. The system studied has a slide-valve pump with mechanical drive and closed fuel injector. Theoretical and experimental injection are compared. Theoretical data fully describe the injection process. Results show that a reduction in atomizer tightness reduces residual pressure and increases fuel leakage along the valve stem of the injector. Fuel preheating in the atomizer chamber during engine operation cannot be disregarded since the temperature of the fuel here is 120-220°C. Changes in the compressibility of the fuel during pre-

Card 1/2

UDC: 621. 431. 74. 004. 68

ACC NR: AT6019145

heating in the fuel system<sup>11</sup> must be taken into account during calculation. Theoretical and experimental pressure curves of diesel fuel systems working with increased viscosity and with long pressure-tubing can be brought into agreement by considering the reduced pressure waves caused by hydraulic drag. Orig. art. has: 5 figures, 12 formulas.

SUB CODE: 13, 21/ SUBM DATE: none/ ORIG REF: 003

Card

2/2 *MLP*

L 37198-66 EWT(m)/EWP(w)/T/EWP(t)/ETI JD/DJ/WE

ACC NR: AT6019146

SOURCE CODE: UR/2807/65/000/224/0035/0044

AUTHOR: Murel', P. Kh.; Soskind, G. L.

ORG: None\*

TITLE: Estimating wear of the 2Ch 8.5/11 engine by exhaust gas analysis

SOURCE: \*Tallinn. Politekhicheskiy institut. Trudy, Seriya A, no. 224, 1965. Sudovyye silovyye ustanovki (Marine power installations) sbornik statey, no. 3, 35-44

TOPIC TAGS: wear resistance, exhaust gas analysis, bushing, engine cooling system, sulfur, engine cylinder, engine piston, fuel deposit formation

ABSTRACT: Data are given from a study of the 2Ch 8.5/11 engine to determine the relationship between the quantitative sulfur dioxide content in exhaust gases and the wear of bushings, cylinders and piston rings at reduced cooling-water temperatures. The 2Ch 8.5/11 engine coupled to a standard generator was used as the basic experimental unit. The engine load was regulated by a rheostat. Grade L (GOST 305-58) fuel with a sulfur content of 0.93% and grade Dp-11 oil were used in all tests. The engine was equipped with a closed cooling system which made it possible to obtain a minimum water temperature of 30° at the engine exit. A second water cooling unit was connected in order to achieve this. Heat conditions were rigidly maintained so as to eliminate any effect of temperature on the operational parameters. The following were measured

Card 1/2

L 37198-36

ACC NR: AT6019146

during testing: exhaust gas temperature, fuel consumption, cooling-water temperature, rpm and power output of the diesel. Lunes were cut in the cylinder sleeves in three horizontal bands at distances of 18, 90 and 172 mm from the top of the sleeve. This was done to determine the absolute wear. Piston ring wear was determined by the weight method. The testing period lasted 100 hours. Deposit formation inside the engine was studied. The amount of sulfur oxides in the engine exhaust gases was determined by the Flint method. A diagram is given for the gas sampling apparatus. The results show that temperature reduction of the cooling water at the engine exit sharply increases cylinder sleeve and piston ring wear if the engine is operating on a fuel with a sulfur content of 0.93%. In this case, sulfur oxides are reduced in the exhaust gases. This study shows that it is possible to make a qualitative evaluation of the wear intensity of cylinder piston groups by analyzing sulfur dioxide and sulfur trioxide content in exhaust gases. The method may be used in the preliminary evaluation of the effectiveness of anticorrosion and multifunctional additives for sulfur-containing fuels and thus eliminate time-consuming testing of engine part wear. This method should be verified further before it is used for this purpose. Orig. art. has: 4 figures, 1 table, 3 formulas.

SUB CODE: <sup>10</sup>~~13~~, 21/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 000

Card 2/2 *MLP*

L 37195-66 EWT(m)/T DJ  
ACC NR: AT6019149

SOURCE CODE: UR/2807/65/000/224/0067/0076

AUTHOR: Murel', P. Kh.; Soskind, G. L.

ORG: None\*

TITLE: The effect which filling the piston cavity of a 4NVD24 engine with oil has on piston head temperature

SOURCE: \*Tallinn. Politekhnikheskiy institut. Trudy, Seriya A, no. 224, 1965. Sudovyye silovyye ustanovki (Marine power installations) sbornik statey, no. 3, 67-76

TOPIC TAGS: marine engineering, engine piston, engine cooling system, temperature control

ABSTRACT: Data are given from tests of the 4NVD24 engine. Contact thermocouples were used for measuring piston temperature at three points (see figure). Two cases were studied: with and without oil filling in the piston cavity. Cooling system water was kept at a constant temperature to eliminate the effect of thermal conditions. Various engine load and operating conditions were considered. The results show that filling the cavity of the 4NVD24 engine piston with oil helps to smooth out piston head temperature by convective heat exchange which reduces temperature somewhat, resulting in stress reduction at the center of the piston head. The piston undergoes maximum heat load during engine operation at a constant fuel supply corresponding to the nominal

UDC: 621.431

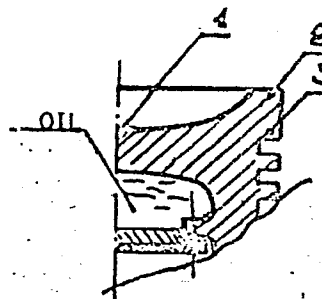
Card 1/2



L 37195-66

ACC NR: AT6019149

power rating. There is practically no drop in temperature at the center of the piston with a reduction in engine speed, so that the temperature differential increases sharply. This temperature differential is reduced by a factor of more than 2 if oil is present in the piston cavity. There is only a slight variation in piston temperature when the thermal conditions of the engine are changed. Oil in the piston cavity reduces temperature differential somewhat when the temperature of the cooling water is raised. There is only a slight increase in temperature differential in the absence of convective heat transfer and when the water temperature is low. When the advance angle of the fuel supply in the 4NVD24 engine is increased, the temperature decreases at all three points (see figure) both for idling conditions and under load. The rate of piston cooling is relatively low. Radial temperature differential holds its maximum value for a considerable time (4-5 minutes) when the engine has been stopped quickly after running under a full load. This differential is lower when the piston cavity is filled with oil. Orig. art. has: 8 figures.



SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 000

Card 2/2 MLP

KUZNETSOV, M.I.; PETROV, I.I.; SOSKOV, A.I.

Improvement of blast furnace top fittings. Metallurg 8 no.9:  
9-13 S '63. (MIRA 16:10)

1. Chelyabinskiy metallurgicheskiy zavod.  
(Blast furnaces—Equipment and supplies)

S/262/62/000/018/005/007  
I007/I207

AUTHOR: Soskind, G.L.

TITLE: The influence of the gap between the atomizer needle and its guide, on fuel leakage in the diesel fuel-injection nozzle.

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no.18, 1962, 59, abstract 42.18.361 (Tr.Tallinsk. politekhn.in-ta, A, no.189, 1961, 36-44)

TEXT: The leakage value is calculated and experimental data are reported for fuel nozzles of type 4410- and 5113 diesels. At a gap value of 6 to 8 micron fuel leakage did not exceed 3% of fuel consumption. Grooves made in the needle are effective only at a gap less than 6 micr. [Abstracter's note: Complete translation.]

Card 1/1

VLADKOV, On.; SOSKOV, SPASOV; VASILEVSKI

Our experience with corticotherapy of some types of osteoarticular, lymph node and pulmonary tuberculosis. Khirurgia 15 no.2/3:293-295 '62.

1. Iz Okruzhen sanatorium za kostno-stavna tuberkuloza - s. Raduntsi.

(TUBERCULOSIS LYMPH NODE ther)  
(TUBERCULOSIS PULMONARY ther)  
(TUBERCULOSIS OSTEOARTICULAR ther)  
(ADRENAL CORTEX HORMONES ther)

SOSKOV, A., podpolkovnik

Engineer reconnaissance and mine field clearance. Voenn. vest.  
42 no.7:82-83 J1 '62. (MIRA 15:6)  
(Mines, Military) (Stream crossing, Military)

SOSKOV, A., podpolkovnik

Preparation of turn-offs. Voen. vest. 42 no.6:93 Ja '62.  
(MIRA 15:6)  
(Stream crossing, Military)

SOSKOV, A.I.

Increasing the durability of pouring machine links. Metallurg  
7 no.10:26 0 '62. (MIRA 15:9)

1. Nachal'nik osnovnogo mekhanicheskogo tsekha Chelyabinskogo  
metallurgicheskogo zavoda.

(Metals--Hardening)

KURAYEV, A.V.; PANFILOV, V.T.; SEMENKOV, P.L.; SOSKOV, B.Ya.; ZARUBIN, A.G.,  
otvetstvennyy red.; LEZHNEVA, Ye.I., red.izd-va; MATVEYEVA, Ye.N.,  
tekhn.red.; TIKHANOV, A.ya., tekhn.red.

[ZIL-164 truck; instructions for operation] Avtomobil' ZIL-164;  
instruktsiia po ekspluatatsii. Moskva, Gos. nauchno-tekhn. izd-vo  
mashinostroit. lit-ry, 1958. 175 p. (MIRA 11:4)

1. Moskovskiy avtomobil'nyy zavod im. I.A.Likhacheva. 2. Zamestitel'  
glavnogo konstruktora Moskovskogo avtomobil'nogo zavoda im. I.A.  
Likhacheva (for Zarubin)  
(Motortrucks)



ZUBAREV, A.; SOSKOV, B. *ya*.

Interchangeability of units of the ZIL-164 and ZIL-150 motortrucks.  
Avto. transp. 36 no.9:32-35 S '58. (MIRA 11:10)

1. Moskovskiy zavod imeni Likhacheva.  
(Interchangeable mechanisms) (Motortrucks)

KAPEL'NITSKIY, V.G.; SHVED, F.I.; YARTSEV, M.A.; TULIN, N.A.; POZDEYEV, N.P.;  
SERGEYEV, A.B.; MERENISHCHEVA, I.I.; KALININA, Z.M.; POZDNYAKOV, M.V.  
Prinimali uchastiye: KUZOVATOV, V.N.; MAKUTOV, R.F.; MYSINA, G.Ye.;  
SHELGAJEVA, A.V.; ZHIVICHKIN, L.A.; GAYDUK, Yu.A.; GALYAN, V.S.;  
SOSKOV, D.A.; KHMELEV, I.I.; PARABINA, G.I.

Making steel and alloys in vacuum furnaces. Stal' 23 no.4:325-328  
Ap '63. (MIRA 16:4)

(Vacuum metallurgy)

(Electric furnaces)

(N) L 11790-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) / MJW/JD

ACC NR: AP6001683

SOURCE CODE: UR/0148/65/000/012/0057/0063

AUTHOR: Dolinin, D. P.; Morozov, A. N.; Khasin, G. A.; Shved, F. I.; Soskov, D. A.; Savenok, L. L. 38 B

ORG: Chelyabinsk Scientific Research Institute of Metallurgy (Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii); Zlatoust Metallurgical Plant (Zlatoustovskiy metallurgicheskiy zavod)

TITLE: Removal of oxygen and nitrogen in vacuum arc melting of ShKh15 steel 18

SOURCE: IVUZ. Chernaya metallurgiya, no. 12, 1965, 57-63

TOPIC TAGS: steel, chromium steel, ball bearing steel, steel melting, vacuum arc melting, steel refining, steel degassing, oxygen removal, nitrogen removal/ShKh15 steel

ABSTRACT: The behavior of <sup>27</sup>oxide and <sup>27</sup>nitride inclusions and the mechanism of the removal of oxygen and nitrogen from ShKh15 [AISI E2100] ball-bearing steel in vacuum arc refining have been investigated. Steel ingots were melted in a 20-t electric furnace and forged into consumable electrodes, 180 mm in diameter, which were remelted twice in a vacuum of  $(1-5) \cdot 10^{-2}$  mm Hg. The first and the second vacuum remelting decreased the oxygen and nitrogen content from the initial 0.00400 to 0.00110 and 0.00095% O, and from 0.0084 to 0.0060 and 0.0045% N. The respective initial content of  $Al_2O_3$  and  $SiO_2$  inclusions decreased from 0.00400 and

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UDC: 669.141.247.083.4.054 2

L 11790-66

ACC NR: AP6001683

0.00270% to 0.00060% each after the first remelting, and to 0.00051 and 0.00026% after the second. Oxygen and nitrogen are removed for the most part as oxide and nitride particles. Hence, a more complete refining can be achieved by promoting the formation in the initial metal of inclusions with a low specific weight and a high interphase energy at the metal-inclusion interface. The high-alumina inclusions which are formed by the deoxidation of the initial metal with an increased amount of aluminum enjoy these properties. Removal of nitride inclusions is promoted by lowering to a minimum (0.002—0.003%) the content of titanium in the initial metal. Orig. art. has: 3 figures and 4 tables. 27 (MS)

SUB CODE: 11/ SUBM DATE: 15Jul64/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 4/78

HW  
Card 2/2

IOTKOV, K.; SOSKOV, N.

Results of prevention of hemorrhage and hard hematomas in extrapleural pneumonolysis. Suvrem. med., Sofia 9 no.7:56-63 1958.

1. Iz Durzhavniia sanatorium Vasil Kolarov Velingrad (Gl. lekar: B. Penkov).

(COLLAPSE THERAPY, compl.

pneumonolysis, extrapleural, with hemorrh. & hard hematoma, prev. (Bul))

IOTKOV, K.; SOSKOV, N.

Exudative period following extrapleural pneumonolysis. Suvr.  
med. 12 no.10:53-58 '61.

1. Iz Darzh. tubsanatorium "V. Kolarov" - Velingrad (Glav.  
lekar B. Penkov).

(PNEUMONOLYSIS)

L 22460-66 EWT(d)/EWT(m)/T/EWT(h)/EWT(l) DJ  
 ACC NR: AP6002544 (A) SOURCE CODE: UR/0286/65/000/023/0043/0043

AUTHORS: Pavlov, Yu. V.; Soskov, O. D. 22  
 B

ORG: none

TITLE: Load-lifting transom. Class 35, No. 176669

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 43

TOPIC TAGS: crane, cargo handling equipment, loading equipment, hoisting equipment, transporting equipment

ABSTRACT: This Author Certificate presents a load-lifting transom<sup>14</sup>, for example, for lifting and transporting a load in a container which has two arms with load hooks at their ends mounted on its frame. To obtain compact construction and maximum utilization of transporting space during package loading and unloading under cramped conditions, the load hook is in the form of a double-shouldered lever pinned through a lever to the push-rod of a hydraulic cylinder mounted on the frame (see Fig. 1). //

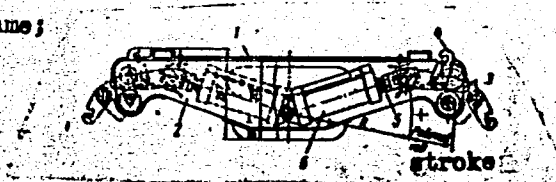
Card 1/2

UDC: 621.86.061.5:621.868.277.5

L 22460-66

ACC NR: AP6002544

Fig. 1. 1 - Load-lifting transom; 2 - frame;  
3 - lever; 4 - hook;  
5 - hydraulic cylinder push-rod;  
6 - hydraulic cylinder.



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 31Aug64

Card 2/2 BK



SOSKOV, Yu.D.

Use of *Rhaponticum carthamoides* in popular medicine. Apt.delo  
7 no.6:84 N-D '58 (MIRA 11:12)

1. Iz Yuzhno-Kazakhstanskoy zonal'noy otrytnoy stantsii Vsesoyuznogo  
nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticeskikh  
rasteniy.

(APHRODISIACS)

SOSKOV, Y.I.D.

Systematics of the genera Rhaponticum Adans. and Leuzea DC.  
Bot.mat.Gerb. 19:396-408 '59. (MIRA 12:8)  
(Asia--Rhaponticum) (Leuzea)

SOSKOV, Yu.D.

Device for rapid drying of herbarium plants during transportation.  
Bot. zhur. 44 no.1:56-59 Ja '59. (MIRA 12:1)

1. Yuzhnokazakhstanskaya zonal'naya opyt'naya stantsiya (sevkhoz  
Darmina) Vsesoyuznogo nauchno-issledovatel'skogo instituta  
lekarstvennykh i aromaticeskikh rasteniy.  
(Plants--Collection and preservation)

SOSKOV, Yu.D.

Some biological features of *Rhaponticum carthamoides* (Willd.)  
Bot. zhur. 44 no.4:507-513 Ap '59. (MIRA 12:10)

1. Yuzhno-Kazakhstanskaya zonal'naya opyt'naya stantsiya Vsesoyuznogo  
instituta lekarstvennykh i aromaticeskikh trav, st. Arys' Yuzhno-  
Kazakhstanskoy oblasti, sovkhcz Darmina.  
(Thistle) (Materia Medica vegetable)

SOSKOV, Yu.D.

Upper Zeravshan is a new area for the growth of Ephedra equisetina  
Bunge. Med. prom. 15 no.3:20-23 Mr '61. (MIRA 14:5)

1. Yuzhno-Kazakhstanskaya zonal'naya opytnaya stantsiya Vsesoyuznogo  
nauchno-issledovatel'skogo instituta lekarstvennykh i aromaticeskikh  
rasteniy.

(ZERAVSHAN VALLEY--EPHEDRA)

SOSKOV, Yu.D.

Device for rapid drying of herbarium plants during transportation.  
Bot. zhur. 46 no.1:80-81 Ja '61. (MIRA 14:3)

1. Botanicheskiy institut Akademii nauk Tadzhikskoy SSR, Stalinabad.  
(Plants—Collection and preservation)

BORISOVA, A.G.; IL'IN, M.M.; KLOKOV, M.V.; LINCHEVSKIY, I.A.; POBEDIMOVA, Ye.G.; SEMIDEL, G.L.; SOSKOV, Yu.D.; SOSNOVSKIY, D.I.; TAMAMSHYAN, S.G.; KHARADZE, A.L.; TSVELEV, N.N.; CHEREPANOV, S.K.; SHOSTAKOVSKIY, S.A.; BOBROV, Ye.G., doktor biol. nauk, prof., red. toma; SHISHKIN, B.K., red. izd. [deceased]; SMIRNOVA, A.V., tekhn. red.

[Tribes Cynareae and Mutisieae.] Kolena Cynareae i Mutisieae.  
Moskva, 1963. 653 p. (Akademiia nauk SSSR. Botanicheskii institut.  
Flora SSSR, vol.28). (MIRA 16:12)

SOSKOV, Yu.D.; UBAYEV, Kh.U.; SMIRNOVA, T.N.

New alkaloid-bearing plants of Central Asia and Kazakhstan.

Izv. Otd. biol. nauk AN Tadzh. SSR no.1:45-57 '63.

(MIRA 17:10)

1. Botanicheskiy institut AN Tadzhikskoy SSR.



SHEFER, D.G.; MALKIN, M.F.; NEYGALIKH, M.G.; RAZUMOVSKAYA, A.M.  
SHERSHEVER, S.M.; SOSKOVA, A.V.

Medical and prophylactic significance of the use of anticoagulants  
in disorders of the brain blood supply. Zhur. nerv. i psikh. 60  
no. 6:702-706 '60. (MIRA 13:12)

1. Klinika nervnykh bolezney Sverdlovskogo meditsinskogo  
instituta, Institut kurortologii i fizioterapii neurologicheskoye  
stantsionary Sverdlovskaya.

(BRAIN—BLOOD VESSELS)

(ANTICOAGULANTS)

ZYSINA-MOLOZHEN, L. M.; SOSKOVA, I. N.

"An investigation of the influence of the compressibility and temperature factor on the structure of a turbulent boundary layer."

report submitted for 2nd All-Union Conf on Heat & Transfer, Minsk, 4-12 May 1964.

Polzunov Boiler & Turbine Inst.

L 24245-66 EWT(1)/EWP(m)/EWP(w)/ETC(f)/EPF(n)-2/ENG(m)/ENA(d)/ENA(1) WW/EM/GS  
 ACC NR: AT6006917 SOURCE CODE: UR/0000/65/000/000/0305/0312 61  
 AUTHOR: Zysina-Molozhen, L. M.; Soskova, I. N.; Shapiro, I. G. B+1  
 ORG: Leningrad Central Boiler and Turbine Institute (Tsentral'nyy  
 kotloturbinnyy institut)  
 TITLE: Investigation of the turbulent boundary layer formed by the flow  
 of a compressible gas around a plate, accompanied by heat transfer 2/  
 SOURCE: Teplo- i massoperenos, t. II: Teplo- i massoperenos pri  
 vzaimodeystvii tel s potokami zhidkostey i gazov (Heat and mass transfer  
 v. 2.: Heat and mass transfer in the interaction of bodies with liquid  
 and gas flows). Minsk, Nauka i tekhnika, 1965, 305-312  
 TOPIC TAGS: turbulent boundary layer, convective heat transfer, gas  
 flow, compressible gas  
 ABSTRACT: The aim of the article is stated to be a theoretical and  
 experimental investigation of the effect on the structure of the  
 turbulent boundary layer, in particular, on the thickness of the laminar  
 sublayer, of the Mach number and the temperature factor, to evaluate  
 their effect on the final result of calculations of the resistance of  
 the plate, and to make more precise the initial hypotheses of the semi-  
 empirical theory. The experimental investigations of the effect of the  
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ACC NR: AT6006917

temperature factor on heat transfer and surface resistance in a stream of compressible gas were carried out in the optical unit of a supersonic aerodynamic tube. The experiments were made over a range of the temperature factor from 1.0 to 2.2 at a Mach number of approximately 1.5 and a Reynolds number of  $10^7$ . The length of the working section was 0.5 meters. Results are exhibited in a series of curves. It was found that at values of the temperature factor substantially less than unity, it is necessary to take into account the dependence of the thickness of the laminar sublayer on the Mach number, and particularly on the temperature factor. At values of the temperature factor less than unity, the effect of the Mach number and the temperature factor on the turbulent transfer constants can in practice be neglected. When the Mach number is less than 3.0, this leads to a decrease in the resistance coefficient by not more than 20%. Orig. art. has: 5 formulas and 6 figures.

SUB CODE: 20/ SUBM DATE: 09Nov65/ ORIG REF: 004/ OTH REF: 005

Card 2/2 *dda*

EXCERPTA MEDICA Sec.4 Vol.11/5 Microbiology, etc. May 1958

*Sošková, L.*

1291. INDUCTION OF PHAGE IN BACTERIA OF SHIGELLA FLEXNERI II BY CYANIDE - Indukce fága u bakterii Shigella flexneri II kyanidem - Sošková L. Úst. pro Obecnou Biol., Lékařská Fak. Univ., Brno - ČSL. MIKRO-BIOL. 1957, 2/3 (157-161) Tables 1 Illus. 4

The action of potassium cyanide in a concentration of 0.2 M on lysogenic bacteria of Shigella flexneri II results in the release of a phage, which, in the course of further passages, attacks and produces lysis in the parent strain from which it is released. This cyanide-induced phage differs from the Shigella D phage in the morphology of the plaques, serologically, and in its host range. It appears to be a temperate phage, whereas the Shigella D phage is virulent. In 7 experiments the cyanide-induced phage appeared in the first passage, in 5 in the second passage. It is believed that hydrogen peroxide is probably formed in the lysogenic culture as a result of the influence of the cyanide and this then has a mutagenic effect on the phages released by the bacteria, resulting in the development of phage mutants which attack the parent strain.

SOSKOVA, L.

The study of the phage antigen in the course of proliferation of phages in infected bacteria.

P. 188, (Ceskoslovenska Mikrobiologie) Vol. 2, no. 3, June 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

CZECHOSLOVAKIA/Man and Animal Physiology. The Effects of  
Physical Efforts.

T

Obs Jour: Ref Zhur-Biol., No 20, 1958, 93738.

infection emanating from the irradiated animals.  
An enlargement of the spleen was noted in irradiated mice with bacteremias, and its return to the normal size took place earlier than in irradiated mice without bacteremia as a result of regeneration. According to the histological data, the enlarged spleen in mice with bacteremia depended on the reaction of the spleen as a result of the septic state. Mice, which on the 7th day after radiation were injected intravenously with a suspension of Escherichia coli B, after twenty-four hours differed more significantly in the weight of the spleen than mice subjected only to radiation. Consequently, on the 7th day after radiation the mouse spleen was capable of responding to a bacterial

Card : 2/3

SOSKA, J.; DRASIL, V.; KARPFEL, Z.; SOSKOVA, L.; PALECEK, Z.; BENES, L.

Significance of desoxyribonucleides in irradiated organism. Cesk. fysiол. 8 no.3:247-248 Apr 59.

1. Biofyzikalni ustav CSAV v Brne a Biologicky ustav lek. fakulty v Brne. Predneseno na III. fysiologickych dnech v Brne dne 15. 1. 1959.

(RADIATIONS, eff.

desoxyribonucleic acid activity in irradiated animal  
as index of effectiveness of transpl. hemopoietic  
tissue (Cz))

(DESOXYRIBONUCLEIC ACIDS, metab.

in irradiated animals, as index of effectiveness of  
transpl. of hemopoietic tissues (Cz))

(HEMOPOIETIC SYSTEM, transpl.

desoxyribonucleic acid activity in irradiated animals  
as index of effectiveness of transpl. (Cz))



OBOLENTSEV, R.D., prof., doktor khim. nauk, otv. red.; GAL'PERN, G.D., doktor khim. nauk, red.; GUR'YANOVA, Ye.N., doktor khim. nauk, red.; MASHKINA, A.V., kand. khim. nauk, red.; PIVOVAROVA, T.Ye., kand. khim. nauk, red.; POZDEYEV, N.M., kand. fiz.-mat. nauk, red.; SOSKOVA, L.M., red. LEVINA, Ye.S., ved.red.

[Chemistry of the sulfur organic compounds in petroleum and petroleum products] Khimiia seraorganicheskikh soedinenii, sodержashchikhsia v neftiakh i nefteproduktakh. Moskva, Khimiia, 1964. 286 p. (MIRA 18:4)

1. Nauchnaya sessiya po khimii sera- i azotoorganicheskikh soedineniy, sodержashchikhsya v neftyakh i nefteproduktakh. 7th, Ufa, 1963.
2. Institut organicheskoy khimii Bashkirskogo filiala AN SSSR (for Soskova, Obolentsev).
3. Fiziko-khimicheskii institut im. L.Ya.Karpova (for Gur'yanova).
4. Institut neftekhimicheskogo sinteza AN SSSR (for Gal'perin).

h 43925-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AT5008630

S/2933/64/007/000/0180/0188

AUTHORS: Obolentsev, R. D. (Doctor of chemical sciences); Lebedeva, M. N.; Kreys, E. A.; Lyapina, N. K.; Soskova, L. M. (Candidate of physico-mathematical sciences)

TITLE: Extraction of organo-sulfur compounds from petroleum products

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya saraorganicheskikh soedineniy, sodержashchikh v neftyakh i nefteproduktakh, v. 7, 1964, 180-188

TOPIC TAGS: petroleum, sulfur, organic compound, distillation, extracting agent, dearomatization, desulfuration

ABSTRACT: The authors point out the need of knowing the distribution of phases among petroleum products in order to solve problems concerning extraction and extractive distillation of organo-sulfur products. Investigations were made on organo-sulfur compounds dissolved in distillate fractions of high-sulfur Kazankova petroleum subjected to preliminary dearomatization and desulfuration. The characteristics of the extracting agents were tabulated. The organo-sulfur compounds were dissolved in the distillate, held at 20C for 20-30 minutes, shaken for 10 minutes, and then let stand at the same temperature till the material

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ACCESSION NR: AT5008630

settled into distinct layers (1-6 hours). The phases were then separated, weighed, and analyzed. The concentration of organo-sulfur compounds was determined in both extracted and refined phases. The experiments show that sulfo-organic compounds may be 90% extracted from petroleum fractions and may be concentrated by a factor of 10-17 with a single run of raw material in the solvent. Best extraction was obtained for the systems: acetic anhydride--122-1500 fraction--2-ethyl thiophene, and furfuryl alcohol--95-1220 fraction--thiophene. Orig. art. has: 3 figures and 5 tables.

ASSOCIATION: Institut organicheskoy khimii BashFAN SSSR (Institute of Organic Chemistry, Bashkirian Branch, AN SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, 00

NO REF SOV: 000

OTHER: 003

Card 2/2

*SOSKOVA, M. S.*  
BELOKOPYTOVA, Ye.V.; ZAYTSEVA, Ye.D.; IVANOVA, V.I.; KUCHERENKO, A.A.;  
OVCHINNIKOVA, L.N.; ODINOKOVA, Ye.A.; SHCHUKIN, N.M.;  
BELOVA, K.F.; *SOSKOVA, M.S.*; DEMIN, P.M., red.; TYIKIN, M.N., red.;  
PULIN, L.I., tekhn. red.

[Economy of Tula Province; a statistical manual] Narodnoe khoziaistvo  
Tul'skoi oblasti; statisticheskii sbornik. [Tula] Tul'skoe knizhnoe  
izd-vo, 1958. 215 p. (MIRA 11:8)

1. Tula (Province). Statisticheskoye upravleniye.  
(Tula Province--Statistics)

Soskova, V. D.

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*Handwritten:* maly

Effect of refractories on the appearance of seed and bubbles in molten glass. N. V. Solonin, A. A. Sokolov, and V. D. Soskova. *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Stakla* 1954, No. 34, 67-77; *Referat. Zhur., Khim.* 1955, No. 2515. A series of expts. was carried out to test whether mullite refractories caused the formation of seed and bubbles. Fireclay crucibles of 2-kg. capacity were charged with fine cullet pieces of various refractories and placed under the charge. The crucibles were then heated to 1450°, kept for 3 hrs. at this temp., then rapidly cooled to 1000, 1100, 1150, or 1200°, and kept at this temp. for 6 hrs. The cooled crucibles were broken longitudinally and the glass examined for bubbles and seed. These tests showed that at 1000-1200° the largest quantity of seed was caused by high-Al<sub>2</sub>O<sub>3</sub> fused refractories containing reduction products which reduce the sulfate in the glass, thus causing evolution of SO<sub>2</sub>. Electrically fused zircon mullite and some other refractories contribute to the formation of small bubbles in the glass at temps. below 1200° and, therefore, should not be used in the walls of the cooling part of glass-melting furnaces.

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*Handwritten:* M. Hosh

15(2)

SOV/72-59-6-7/18

AUTHORS:

Vilnis, K. K., Pollyak, V. V., Soskova, V. D.

TITLE:

A Device for Taking Samples From Deep Frit Layers (Pribor dlya  
vzyatiya glubinnykh prob steklomassy)

PERIODICAL:

Steklo i keramika, 1959, Nr 6, pp 32 - 35 (USSR)

ABSTRACT:

The authors of this article discuss the disadvantages of ordinary devices for taking frit samples which do not allow to take pure samples from deep frit layers. On the basis of investigations performed by the teplotekhnicheskaya laboratoriya Instituta stekla (Laboratory for High-temperature Research of the Glass Institute) a new construction of the device as well as a new method for the afore-mentioned purpose were worked out. The new method is based on the principle that the glass frit is sucked in on a certain level by creating vacuum with an injector. The general view, the longitudinal section, and the injector of the device are illustrated in figures 1, 2, and 3 and then described. There are 3 figures.

Card 1/1

FOLLYAK, V.V.; SOSKOVA, V.D.; MAZUR, A.K.

Melting sheet glass at an increased temperature. Stek. i ker. 19  
no.2:5-10 F '62. (MIRA 15:3)

(Glass furnaces)

OBRAZTSOV, V.N., 1874-1949; SHAUL'SKIY, F.I., doktor tekhnicheskikh nauk, professor; ZEMBLINOV, S.V., doktor tekhnicheskikh nauk, professor; SOSKOVICH, V.A., doktor tekhnicheskikh nauk, professor; [deceased]; NIKITIN, V.D., doktor tekhnicheskikh nauk, professor; KOCHNEV, F.P., doktor tekhnicheskikh nauk, professor; TIKHOMIROV, N.M.; CHVANOV, V.G., redaktor; ZELENKOVA, Ye.G., tekhnicheskiy redaktor

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akademii nauk SSSR. Vol.1. 1955. 444 p. (MLRA 9:1)

(Railroads) (Transportation)



KISS, Lorant, okleveles gepeszmernok; CSERNAVOLGYI, Laszlo; HAJDU, Istvan;  
BENKOVICS, Jozsef; TERNYAK, Beno; SOSKUTI, Andras; TOROK, Mihaly, dr.;  
SZASZ Frigyes; GATI, Geza; KOVACS, Lajos; DEHENES, Zoltan; MAGYAROKI,  
Laszlo; KOVACS, Gyula; AUERSWALD, Janos; SOS, Janos; DIOSZEGHY, Daniel,  
prof.

Manufacture and use of gas appliances. Energia es atom 17 no.1:  
30-35 Ja'64.

1. Lampagyar (for Kiss).
2. Vegyterv (for Csernavolgyi).
3. Orszagos Koolaj- es Gazipari Troszt (for Hajdu, Szasz, Auerswald).
4. Pecszi Gazszolgaltato Vallalat (for Benkovics).
5. Asvanyolaj-forgalmi Vallalat (for Ternyak, Soskuti).
6. Epitesugyi Miniszterium Iparterv Muszaki Osztaly (for Torok).
7. Orszagos Villamosenergia Felugyelet (for Gati).
8. Epitesugyi Miniszterium (for Lajos Kovacs).
9. Gazkeszulekgyarto Vallalat (for Dehenes).
10. Epitestudomayi Intezet (for Gyula Kovacs).

SCSNUTOVA, G.P.

Primary cancer of the fallopian tubes detected by means of  
hysterosalpingography; 4 observations. Vop. onk. 11 no.9:  
64-65 '65. (MIRA 18:9)

1. Iz ginekologicheskogo otdeleniya (zav. - prof. V.P.Tobilevich)  
Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN  
SSSR prof. A.I.Serebrov).

HUNGARIAN

PROHASKA, László, Dr, SOOSY, Gyula, chemist of the Fortified Fodder Factory (Erőszakmágyar) of Budapest; Research Institute of Veterinary Medicine (Állatorvossegügyi Kutató Intézet) of MTA (Magyar Tudományos Akadémia -- Hungarian Academy of Sciences) (director: MESLÁROS, János, Dr, candidate of veterinary medicine).

"Stability of Vitamin A Mixed with Poultry Food."

Budapest, Magyar Állatorvosok Lapja, Vol 18, No 1, Jan 63, pp 37-39.

Abstract: [Authors' English summary modified] The vitamin A content of poultry feed was determined by the method of Carr and Price. The vitamin is not distributed evenly in industrial fodder. Therefore, testing should be carried out on several samples of 5-20 g each. Fatty fodder may undergo autooxidation on storage and its acidity may increase. Peroxides formed during the process may decompose the vitamin. This can be prevented by the admixture of the antioxidant ethoxy-methyl-hydroquinoline. Fodder may then be stored for at least two months without vitamin loss. In five months, 50 % vitamin A loss may be expected and in such cases additional vitamin A should be given to the animals. Of 4 references, 2 are Hungarian, 2 are Western.

TTT

*Soslovskaya, A.T.*

SOSLOVSKAYA, A.T. (Khar'kov)

The first lesson in the seventh class. Fiz. v shkole 15  
no.4:36-37 J1-Ag'55. (MIRA 8:10)

(Heat--Study and teaching)